IV. REMARKS

Section headings have been added to the specification as requested by the Examiner. Also obvious typographical errors have been corrected.

Claim 10 has been amended as requested by the Examiner. Thus it is no longer objectionable. Claim 11 has been similarly amended.

The claims have been extensively amended to better conform to U.S. practice without changing the scope of the independent claims.

Claim 17 has been added to more fully protect the invention. Since it is based on original claim 1, it is supported by the application as filed.

Claims 1, 6-9, 11-13 and 15 are not unpatentable under 35 U.S.C. 102(a) over Alamouti in view of Petty.

The present invention is concerned with the problem of determining which antenna is in use in a space diversity system so that the proper channel coefficient can be used with the received signal. It solves this problem by starting a transmission of a sequence of symbols from a predefined antenna and starting the transmission pattern from the beginning in the beginning of each frame, all as recited in claims 1 and 17. Claims 12 and 13 have similar limitations.

First concerning the technical field of the references, it is respectfully submitted that they are far from each other. Alamouti concerns the wireless transmission of symbols over an air interface using at least space diversity and additionally time or frequency diversity. Petty concerns the wired

transmission of symbols over a cable interface using time division multiplexing. It is for the problem of the inflexibility of substrate multiplexers (see column 2, lines 8-21). Since it is a wired system, the problem of using the wrong channel coefficient does not even arise. Thus, it is improper to combine these references to solve the problem solved by the present invention, see In re Bigio, 72 USPQ2d 1209, 1212.

Second, the Examiner refers to figure 2 in Petty, where each frame has the length of five time slots, and the frame rhythm is kept up by transmitting the appropriate bit from a framing bit pattern "01100" in the framing bit position of each time slot. The Examiner states that a "partial transmission pattern" consisting of bits 00 in slots 4 and 5 of frame 106 is present, although these bits only appear at their natural positions at the end of the complete framing bit pattern "01100". According to the Examiner, if a bit pattern has an end, it also exhibits a partial bit pattern at the end because if one only looks at one part of the whole pattern, one only sees a part of the pattern. It is respectfully submitted that this is not correct since Petty only discloses complete transmission patterns in all frames. Thus the recited starting the transmission of a sequence of symbols from a predetermined antenna and starting the transmission from the beginning in the beginning of each frame is missing.

In summary, Petty and Alamouti are technically incompatible, and thus they cannot be combined. Even if they are somehow combined, the result is not the present invention since the recited features are missing.

Thus the rejection of the above claims should be withdrawn.

Claims 2, 3, 4, and 5 are not unpatentable under 35 U.S.C. 103(a) over Alamouti in view of Petty and further in view of Yamaura.

Similarly, Yamaura fails to disclose the above features. Thus adding it to Alamouti and Petty does not result in the present invention. Further, it is for the problem of a large computation time (see column 5, lines 45-49). Thus it cannot be combined with the first two references in the first place to solve the problem of using the wrong channel coefficient, which is solved by the present invention. Hence the rejection of claims 2, 3, 4 and 5 should be withdrawn.

Claims 10, 14 and 16 are not unpatentable under 35 U.S.C. 103(a) over Alamouti in view of Petty and further in view of an admitted prior art (the specification).

Also, the admitted prior art fails to disclose the above feature. Further, it makes absolutely no mention of the problem of using an incorrect channel coefficient. Hence it cannot be combined with the first two references, and even if it is somehow combined, the result is not the present invention. Thus combining it with Alamouti and Petty does not result in the present invention. Hence the rejection of claims 10, 14 and 16 should be withdrawn.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of $320.00 is enclosed for the additional claim, and a one-month extension of time fee. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

Geza C. Ziegler, Jr.
Reg. No. 44,004

23 May 2006
Date

Perman & Green, LLP
425 Post Road
Fairfield, CT 06824
(203) 259-1800
Customer No.: 2512

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